

**From:** [Turner, Philip](#)  
**To:** [Enders, Jhana](#)  
**Subject:** Re: Preliminary Sampling Results Attached  
**Date:** Friday, February 3, 2017 6:00:14 PM  
**Attachments:** [image004.png](#)

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It appears all samples are fairly consistent with each other, and it appears the detection limit was 0.023 mg/m<sup>3</sup> (23 ug/m<sup>3</sup>), although they do not really indicate.

As such, all the values <23-33 ug/m<sup>3</sup> are well below our 8-h AEGL. These values are however, also well above our chronic screening value (0.31 ug/m<sup>3</sup>). We've already discussed that the chronic screening value may not be a necessary comparison and that a method to detect that low was not identified.

Although all measurements are very close to each other, I do find it interesting that the highest value (33 ug/m<sup>3</sup>) came from the HVAC closet. This closet is also likely the most vulnerable spot in the house.

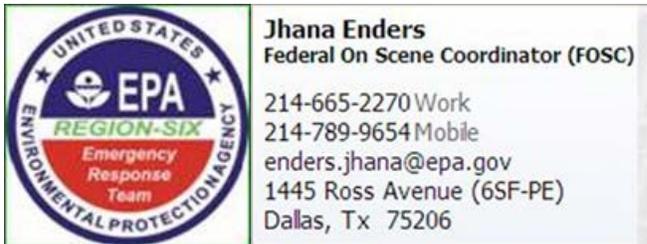
Phil

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**From:** Enders, Jhana  
**Sent:** Thursday, February 2, 2017 6:44:58 PM  
**To:** May, Shaun  
**Cc:** Turner, Philip; Eddy Vance; Chester, BJ; david.durst@tceq.texas.gov; Bojes, Heidi (DSHS); Stoughton, Casie; Britten, Brad; West, Theresa; Young, Patrick; Orton, Chip  
**Subject:** Preliminary Sampling Results Attached

These are the 'PRELIMINARY' sampling results. The final results won't be back for about a week but I don't expect them to change. We need to have a call next week to discuss future plans. Chip, I can assist with a conference line if you can find a date/time that works for everyone.

Thanks.



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**From:** Orton, Chip [mailto:Chip.Orton@amarillo.gov]  
**Sent:** Thursday, February 02, 2017 3:46 PM  
**To:** Enders, Jhana ; May, Shaun  
**Cc:** Turner, Philip ; Eddy Vance ; Chester, BJ ; david.durst@tceq.texas.gov; Bojes, Heidi (DSHS) ; Stoughton, Casie ; Britten, Brad ; West, Theresa  
**Subject:** RE: Final Sampling Protocol and Detection level - (b) (6) Street  
Any update Jhana?  
Chip

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**From:** Enders, Jhana [mailto:Enders.Jhana@epa.gov]  
**Sent:** Monday, January 30, 2017 11:38 AM  
**To:** May, Shaun  
**Cc:** Turner, Philip; Eddy Vance; Chester, BJ; Orton, Chip; david.durst@tceq.texas.gov; Bojes, Heidi (DSHS); Stoughton, Casie; Britten, Brad; West, Theresa

**Subject:** Re: Final Sampling Protocol and Detection level - Carolyn Street  
The samples were taken on Saturday and we should have the results back Wednesday or Thursday.  
I will share the results with the group when received. Thanks

Sent from my iPad

On Jan 26, 2017, at 4:19 PM, May, Shaun <[Shaun.May@amarillo.gov](mailto:Shaun.May@amarillo.gov)> wrote:

I concur as well.  
Thanks  
Shaun

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808 South Buchanan Street  
P.O. Box 1971  
Amarillo, TX 79105-1971

Ofc. (806) 378-9473  
Cell. (850) 797-1778  
Fax. (806) 378-3585

[amarillo.gov](http://amarillo.gov)

**Shaun C. May, M.P.H., R.E.H.S.**  
**Environmental Health Director**  
**Bi-City-County Health District**  
[shaun.may@amarillo.gov](mailto:shaun.may@amarillo.gov)

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**From:** Enders, Jhana [<mailto:Enders.Jhana@epa.gov>]  
**Sent:** Thursday, January 26, 2017 2:54 PM  
**To:** Turner, Philip; May, Shaun; Eddy Vance; Chester, BJ; Orton, Chip; [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov)  
**Cc:** Bojes, Heidi (DSHS); Stoughton, Casie; Britten, Brad; West, Theresa  
**Subject:** RE: Final Sampling Protocol and Detection level - (b) (6) Street  
Sounds like a good plan – will do unless I hear differently. Thanks.

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**From:** Turner, Philip  
**Sent:** Thursday, January 26, 2017 2:53 PM  
**To:** Enders, Jhana <[Enders.Jhana@epa.gov](mailto:Enders.Jhana@epa.gov)>; May, Shaun <[Shaun.May@amarillo.gov](mailto:Shaun.May@amarillo.gov)>; Eddy Vance <[eddy.vance@tceq.texas.gov](mailto:eddy.vance@tceq.texas.gov)>; Chester, BJ <[BJ.Chester@amarillo.gov](mailto:BJ.Chester@amarillo.gov)>; Orton, Chip <[Chip.Orton@amarillo.gov](mailto:Chip.Orton@amarillo.gov)>; [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov)  
**Cc:** Bojes, Heidi (DSHS) <[Heidi.Bojes@dshs.state.tx.us](mailto:Heidi.Bojes@dshs.state.tx.us)>; Stoughton, Casie <[Casie.Stoughton@amarillo.gov](mailto:Casie.Stoughton@amarillo.gov)>; Britten, Brad <[Brad.Britten@amarillo.gov](mailto:Brad.Britten@amarillo.gov)>; West, Theresa <[Theresa.West@amarillo.gov](mailto:Theresa.West@amarillo.gov)>  
**Subject:** Re: Final Sampling Protocol and Detection level - (b) (6) Street  
My suggestion to run the HVAC to get up to temperature, but NOT to have it running during actual sampling... assuming sampling does not take so long that the house cools off too much during.

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**From:** Enders, Jhana  
**Sent:** Thursday, January 26, 2017 2:40 PM  
**To:** May, Shaun; Eddy Vance; Chester, BJ; Orton, Chip; [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov)  
**Cc:** Bojes, Heidi (DSHS); Turner, Philip; Stoughton, Casie; Britten, Brad; West, Theresa  
**Subject:** RE: Final Sampling Protocol and Detection level - (b) (6) Street

Do you all have a preference for HVAC on or off? If on, might circulate air better but could also end up being too much circulation to get a consistent sample...

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**From:** May, Shaun [<mailto:Shaun.May@amarillo.gov>]

**Sent:** Thursday, January 26, 2017 2:02 PM

**To:** Enders, Jhana <[Enders.Jhana@epa.gov](mailto:Enders.Jhana@epa.gov)>; Eddy Vance <[eddy.vance@tceq.texas.gov](mailto:eddy.vance@tceq.texas.gov)>; Chester, BJ <[BJ.Chester@amarillo.gov](mailto:BJ.Chester@amarillo.gov)>; Orton, Chip <[Chip.Orton@amarillo.gov](mailto:Chip.Orton@amarillo.gov)>; [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov)

**Cc:** Bojes, Heidi (DSHS) <[Heidi.Bojes@dshs.state.tx.us](mailto:Heidi.Bojes@dshs.state.tx.us)>; Turner, Philip <[Turner.Philip@epa.gov](mailto:Turner.Philip@epa.gov)>; Stoughton, Casie <[Casie.Stoughton@amarillo.gov](mailto:Casie.Stoughton@amarillo.gov)>; Britten, Brad <[Brad.Britten@amarillo.gov](mailto:Brad.Britten@amarillo.gov)>; West, Theresa <[Theresa.West@amarillo.gov](mailto:Theresa.West@amarillo.gov)>

**Subject:** RE: Final Sampling Protocol and Detection level - (b) (6) Street  
Jhana, here are the recommendations that Dr. Milton would like to share with Unified Command regarding confirmation sampling:

- 1) Pull a sample in each room of the house, at 12 inches off the floor as close to the floor vents as possible. Additional samples to be pulled in the HVAC closet.
- 2) Samples must be pulled only when ambient air is 70 degree F or greater.

Please let me know if you have additional questions or concerns.

Thanks

Shaun

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808 South Buchanan Street  
P.O. Box 1971  
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Ofc. (806) 378-9473  
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Fax. (806) 378-3585

[amarillo.gov](http://amarillo.gov)

**Shaun C. May, M.P.H., R.E.H.S.**  
**Environmental Health Director**  
**Bi-City-County Health District**  
[shaun.may@amarillo.gov](mailto:shaun.may@amarillo.gov)

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**From:** Enders, Jhana [<mailto:Enders.Jhana@epa.gov>]

**Sent:** Wednesday, January 25, 2017 5:25 PM

**To:** May, Shaun

**Subject:** RE: Final Sampling Protocol and Detection level - (b) (6) Street

Thanks Shaun

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**From:** May, Shaun [<mailto:Shaun.May@amarillo.gov>]

**Sent:** Wednesday, January 25, 2017 5:23 PM

**To:** Enders, Jhana

**Cc:** Orton, Chip ; [eddy.vance@tceq.texas.gov](mailto:eddy.vance@tceq.texas.gov); [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov); Chester, BJ ; Milton, S ; Bojes, Heidi (DSHS) ; Turner, Philip ; Britten, Brad ; West, Theresa ; Stoughton, Casie

**Subject:** Re: Final Sampling Protocol and Detection level - (b) (6) Street

I see. Ok, I will consult with Dr. Milton.

Shaun

Sent from my iPhone

On Jan 25, 2017, at 5:15 PM, Enders, Jhana <[Enders.Jhana@epa.gov](mailto:Enders.Jhana@epa.gov)> wrote:

We monitored at multiple locations as there was no specific guidance

given. Would like a recommendation from the group to ensure we are accurately addressing any concerns you might have. Thanks.

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**From:** May, Shaun [<mailto:Shaun.May@amarillo.gov>]  
**Sent:** Wednesday, January 25, 2017 5:09 PM  
**To:** Enders, Jhana <[Enders.Jhana@epa.gov](mailto:Enders.Jhana@epa.gov)>; Orton, Chip <[Chip.Orton@amarillo.gov](mailto:Chip.Orton@amarillo.gov)>; [eddy.vance@tceq.texas.gov](mailto:eddy.vance@tceq.texas.gov); [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov); Chester, BJ <[BJ.Chester@amarillo.gov](mailto:BJ.Chester@amarillo.gov)>  
**Cc:** 'Milton, S' <[s.milton@ttuhsc.edu](mailto:s.milton@ttuhsc.edu)>; Bojes, Heidi (DSHS) <[Heidi.Bojes@dshs.state.tx.us](mailto:Heidi.Bojes@dshs.state.tx.us)>; Turner, Philip <[Turner.Philip@epa.gov](mailto:Turner.Philip@epa.gov)>; Britten, Brad <[Brad.Britten@amarillo.gov](mailto:Brad.Britten@amarillo.gov)>; West, Theresa <[Theresa.West@amarillo.gov](mailto:Theresa.West@amarillo.gov)>; Stoughton, Casie <[Casie.Stoughton@amarillo.gov](mailto:Casie.Stoughton@amarillo.gov)>  
**Subject:** RE: Final Sampling Protocol and Detection level - (b) (6)  
Street

My assumption is that they would be the same number and the same locations that were used during the air monitoring phase as we are conducting confirmatory sampling. I would certainly defer to any recommendations from Dr. Milton, Dr. Bojes, and Dr. Turner. However, if specific numbers and locations were not used each time during the monitoring phase, then we will need obviously need to determine numbers and locations.

Shaun

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Street  
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**Shaun C. May, M.P.H., R.E.H.S.  
Environmental Health Director  
Bi-City-County Health District  
[shaun.may@amarillo.gov](mailto:shaun.may@amarillo.gov)**

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**From:** Enders, Jhana [<mailto:Enders.Jhana@epa.gov>]  
**Sent:** Wednesday, January 25, 2017 5:04 PM  
**To:** May, Shaun; Orton, Chip; [eddy.vance@tceq.texas.gov](mailto:eddy.vance@tceq.texas.gov); [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov); Chester, BJ  
**Cc:** 'Milton, S'; Bojes, Heidi (DSHS); Turner, Philip; Britten, Brad; West, Theresa; Stoughton, Casie  
**Subject:** RE: Final Sampling Protocol and Detection level - (b) (6)  
Street

Ok, need just a little more info...how many samples and where do you want them collected from? Thanks.

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**From:** May, Shaun [<mailto:Shaun.May@amarillo.gov>]  
**Sent:** Wednesday, January 25, 2017 2:59 PM  
**To:** Orton, Chip <[Chip.Orton@amarillo.gov](mailto:Chip.Orton@amarillo.gov)>; Enders, Jhana <[Enders.Jhana@epa.gov](mailto:Enders.Jhana@epa.gov)>; [eddy.vance@tceq.texas.gov](mailto:eddy.vance@tceq.texas.gov); [david.durst@tceq.texas.gov](mailto:david.durst@tceq.texas.gov); Chester, BJ <[BJ.Chester@amarillo.gov](mailto:BJ.Chester@amarillo.gov)>

Cc: 'Milton, S' <[s.milton@ttuhsc.edu](mailto:s.milton@ttuhsc.edu)>; Bojes, Heidi (DSHS) <[Heidi.Bojes@dshs.state.tx.us](mailto:Heidi.Bojes@dshs.state.tx.us)>; Turner, Philip <[Turner.Philip@epa.gov](mailto:Turner.Philip@epa.gov)>; Britten, Brad <[Brad.Britten@amarillo.gov](mailto:Brad.Britten@amarillo.gov)>; West, Theresa <[Theresa.West@amarillo.gov](mailto:Theresa.West@amarillo.gov)>; Stoughton, Casie <[Casie.Stoughton@amarillo.gov](mailto:Casie.Stoughton@amarillo.gov)>

**Subject:** Final Sampling Protocol and Detection level - (b) (6) Street  
**Importance:** High

Good morning everyone,

Dr. Milton, myself, Dr. Bojes, and Dr. Turner discussed final confirmation sampling for (b) (6) Street yesterday afternoon. Dr. Bojes and Dr. Turner presented their recommendation for the detection level and methodology for confirmation sampling. Their recommendation to Dr. Milton was to use the OSHA Method 1003 for Phosphine Gas. The detection level for this method is 10 ppb or 13 µg/m<sup>3</sup>. Dr. Milton has agreed to proceed with the recommendation. Dr. Turner will be coordinating with Jhana and the contractors under her supervision. At this time, we do not have an exact time estimate on the delivery of the sampling cassettes or their arrival on-site here in Amarillo. It is our understanding that Jhana, with support from Dr. Turner, will be overseeing the confirmation sampling protocol.

I have attached a link to the sampling protocol for reference - <https://www.osha.gov/dts/sltc/methods/mdt/mdt1003/1003.html>

Please let me know if you have any questions or concerns.

Additionally, I have spoken with Dr. Milton and he approves dropping the 24-security detail for the property/home provided that the gate to the property can be locked/secured along with the home being secured/locked.

Thanks

Shaun



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Environmental Health Director  
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[shaun.may@amarillo.gov](mailto:shaun.may@amarillo.gov)**